

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027018**Date Inspected:** 11-Jan-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed , to observe the welding and the QC inspection of the following:

Rick Bettencourt-OBG W12 (Observation of welding and QC inspection of lifting lug holes) and observation of the modifications of the existing bike path panels as per the CCO: 193 and ABF Submittal 2549 R1.

Doug Frey- OBG E12 (Observation of welding and QC inspection on the lifting lug holes), OBG field splice E12/E13 (Observation of repair welding and QC inspection of side and bottom plate splice identified accordingly as "E2" & "D1"), South Tower Shaft, Elev. 139 M (Observation of welding and QC inspection of access ladders) and QA/NDE verification.

Ken Riley-OBG W12 (Observation of welding and QC inspection of LLH) and QA/NDE Verification.

NOTE: See QA daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

**Quality Assurance Lead Inspector (QALI) Summary**

This QA Lead Inspector (QALI) observed the QA Inspector's Rick Bettencourt, Douglas Frey and Ken Riley

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monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues was noted on this date. This QALI also verified the following in progress work:

### FW Spencer/Pipe Welding of Utility Systems

This QALI observed the fit-up and CJP welding of the pipe 2.5" and 4" utility service system field splices. The welding was performed by FW Spencer personnel Damian LLanos, identification # 6645, utilizing the WPS identified as 1-12-1 and was utilized by the QC Inspector, Steve Jensen, and were noted as 85 amps. The work performed on this date was located at the west OBG W1 through W3 along grid line W2 between PP19 and PP27. Later in the shift, Mr. Jensen, requested QA verification of the following pipe welds:

WATER SYSTEM	COMPRESSED AIR SYSTEM
7/2.5"/13/NW	7/4"/13/NW
8/2.5"/15/NW	8/4"/15/NW
9/2.5"/17/NW	9/4"/17/NW
10/2.5"/19/NW	10/4"/19/NW

The QA verification of the above items appeared to comply with the contract specifications. The in process welding and the inspection performed by the QC inspector Mr. Jensen appeared to comply with the contract specifications.

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates).

### Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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**Inspected By:** Reyes,Danny

Quality Assurance Inspector

**Reviewed By:** Levell,Bill

QA Reviewer